

## Measles Serology

Description	<p>Measles serology is performed by enzyme immunoassay or indirect fluorescent assay. Detection of measles IgM in a single serum sample is an indicator of acute measles infection. The gold standard for diagnostic serological assays is <math>\geq 4</math>-fold rise in titer for measles-specific IgG between acute and convalescent serum. Acute samples can be tested for both IgM and IgG (CPT code(s): 86765 x2). Immunity screen requires IgG determination only (CPT code: 86765).</p> <p>Providers are encouraged to collect serum specimens in conjunction with respiratory and urine specimens when possible to assist with the diagnosis of measles.</p>
Pre-Approval Required	<p>Consultation and approval is required by the Los Angeles County Department of Public Health Immunization Program for diagnostic measles laboratory testing.</p> <p>To report suspect measles, Immunization Program can be reached weekdays 7:30 am-5:00 pm by calling 213-351-7800.</p> <p>During non-business hours (before 7:30 am, after 5:00 pm, or weekends) call 213-974-1234 and ask for the Administrator on Duty (AOD).</p>
Supplemental Information or Required Form(s)	Los Angeles County PHL Test Requisition
Acceptable Specimen Type(s)	<p>Serum collected in red top or gold top serum separator tube. Note: For infants, capillary tubes may be used for specimen collection.</p> <p>See special instructions from CDPH-VRDL located at:  <a href="http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPHMeaslesLabTesting2011-01.pdf">http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPHMeaslesLabTesting2011-01.pdf</a></p>
Minimum Volume Required	2-5 mL for vacutainer specimens
Storage/Transport Conditions	Blood specimens should be stored at 4-8 °C. Specimens should be submitted in a biohazard specimen bag with absorbent material. Transport specimens on cold pack.
Specimen Labeling and Special Handling Requirements	Patient's name (Last, First), MRN, DOB, specimen type, date collected
Shipping Instructions and Specimen Handling Requirements	To schedule a courier during regular business hours M-F 8:00 AM – 5:00 PM, contact Central Accessioning at (562) 658-1460. After hours call 213-974-1234 and ask for the Public Health Laboratory Director.
Test Methodology	IFA or EIA

Turnaround Time	1-3 business days after specimen receipt at the Public Health Laboratory
Reference Range	Not Detected
Additional Information	In recently vaccinated persons (6-45 days prior to rash onset), neither IgM nor IgG responses can distinguish measles disease from a vaccination response. A separate specimen (urine, NP, or throat) must be submitted for Measles PCR and genotyping to distinguish between vaccine and wild-type strains.
CPT Code(s)	86765